

Attachment 3

to Operations Group Chairman's Factual Report

DCA06MA022



DC-8 AIRCRAFT OPERATING MANUAL

CHAP: 2
PAGE: 1
REV : 43
DATE: 12/01/04

INTRODUCTION

This chapter contains emergency and abnormal checklists and procedures. Also included is a description of aircraft emergency equipment and its location on the aircraft. While every attempt is made to establish necessary non-normal procedures, it is not possible to develop a procedure for all conceivable situations, especially those involving multiple failures. In certain situations, especially those involving multiple failures, crews may have to combine elements of more than one procedure and/or exercise judgment to determine the safest course of action.

The Quick Reference Handbook (QRH) is designed to be used when conditions require prompt action. It contains selected emergency and abnormal checklists which are available for rapid recovery and reference by the crew. The checklists contained in the QRH, along with all other checklists, can also be found in this chapter of the AOM. The index at the beginning of each major QRH section details the location of each checklist. Assuming the QRH contains the applicable checklist, crewmembers are permitted to use it or this chapter in the process of stabilizing a given emergency/abnormal situation. Some procedural notes and explanations contained in this chapter are not included in the QRH. Therefore, should the QRH be used first, it is recommended that, time and conditions permitting, Second Officers refer to this chapter to ensure all additional, supplementary, or clean-up actions have been completed.

GENERAL PROCEDURES

Any crewmember detecting an emergency or abnormal condition shall immediately identify and verbally communicate the condition to the other crewmembers.

Crewmembers will reset/silence any master warning light or aural warning as soon as the cause of the warning is determined. Silencing/resetting of master warnings is a normal crew action and is not listed in any procedure.

Crewmembers should check circuit breakers and test lights when appropriate. Checking circuit breakers and testing lights is normal crew action and is not listed in any procedure, unless there is a specific requirement.

A tripped circuit breaker may be reset once, at the Captain's discretion, after a two minute cooling period. If the circuit breaker trips again, do not attempt another reset.

The first priority is always to fly the airplane and maintain control. After that, the crew must analyze the situation, prioritize actions, and decide on an appropriate checklist(s) to stabilize the emergency or abnormal situation. In general, the first course of action is to address the airplane's ability to fly through the execution of an emergency checklist. Once that action is complete, the crew must assess any other abnormal situation, and stabilize it through execution of the appropriate abnormal checklist. The final priority is to ensure the airplane is ready for a safe recovery through use of a normal checklist. Therefore, for planning purposes, checklists should be accomplished in the following order of priority:

- Emergency Checklists
- Abnormal Checklists
- Normal Checklists

For example, should a crew experience an engine fire on takeoff resulting in a rejected takeoff, a logical sequence of actions after the airplane is under control would be: Engine Fire or Severe Damage checklist (Emergency), Severe Braking checklist (Abnormal), and After Landing checklist (Normal).

DC-8 AIRCRAFT OPERATING MANUAL



Certain checklists contain "Entry Points." All entry points, notes, warnings, and cautions that are NOT indented should be evaluated by the crew, as in certain situations crew actions will differ based upon warning lights and instrument indications. Primary Entry Points are in all caps, bold, and underlined print. Once a non-indented entry point is used, all entry points, notes, cautions, and warnings that are indented below that primary entry point apply to that specific entry. For example, in the BUS POWER FAIL LIGHT ILLUMINATED checklist, after checking the voltage, frequency, and load, the Second Officer will continue the checklist at either the

**"IF VOLTAGE AND FREQUENCY
NORMAL, LOAD NOT ZERO"** entry point, or the

"IF AC LOAD ZERO" entry point.

If further conditional evaluation is required after entry point items are executed, then additional entry points will be indented from the primary entry point.

The following is the entry point nomenclature:

- **ALL CAPS, BOLD, UNDERLINED**
- **Lower case, bold, underlined**
- **Lower case, bold**
- Lower case

The end of a checklist procedure is annotated as **"END OF PROCEDURE."** Upon reaching this annotation at the end of a checklist, the crewmember reading the checklist announces "_____ checklist complete."

Some abnormal checklists have the normal Approach and Landing checklists incorporated within. This is for crewmember convenience, to avoid confusion concerning when the normal checklists should be accomplished during the abnormal procedure.

CHECKLIST PROCEDURES

Successful handling of emergencies is largely dependent on proper cockpit resource management under the leadership of the Captain. The Captain must provide clear direction during any emergency or abnormal situation.

When an emergency or abnormal condition is identified, the Pilot Flying (PF) initially determines the exact nature of the problem and calls for a specific emergency or abnormal checklist. In the event the First Officer is PF when a malfunction occurs, decisions regarding which checklist to accomplish, and the designation of PF and PM, are always subject to final determination by the Captain. As Pilot-in-Command the Captain has ultimate responsibility, and authority, with regard to the operation and safety of the aircraft and crew.

The overriding matter of importance at all times is very basic: **SOMEONE MUST FLY THE AIRCRAFT.** The PF devotes his entire awareness to the control and navigation of the airplane with regard to terrain, weather, air traffic control and aircraft configuration. The PM retains his usual cockpit duties, as well as ensuring all checklist items are accomplished.

Certain controls in the cockpit are considered Critical Items. They are not actuated without confirmation from another crewmember. These controls are:

- Throttles
- Fuel Shutoff Levers
- Fire Handles
- CSD Disconnect Switches

The Captain shall ensure the Second Officer is briefed on the important elements of every phase of flight. He will direct the Second Officer to call out altitudes, minimums and any other standard callout omitted by one of the pilots.



DC-8 AIRCRAFT OPERATING MANUAL

CHAP: 2
PAGE: 3
REV : 43
DATE: 12/01/04

EMERGENCY PROCEDURES

Immediate Action items refer to steps on an emergency checklist that must be accomplished by memory, without undue delay. These items are highlighted in the checklist by a box. These steps are accomplished by the crew in a Challenge, Response, Response format. The PM fully recites each step, Challenge and Response. The crewmember performing the action then repeats the Response, after completing the action. Each step shall be completed prior to reciting the next step.

Immediate action steps that include actuation of Critical Items are accomplished in the following manner:

The PM recites the Challenge and Response. If the item is a Throttle or Fuel Shutoff Lever, the PM actuates the item. If the item is a Fire Handle or CSD Disconnect, the Second Officer actuates the item. In either case, the crewmember performing the action must receive confirmation from the other crewmember prior to actuating the item. Confirmation is to ensure the item is associated with the malfunctioning system. After confirmation, and after the crewmember actuates the control, he repeats the Response.

An example of how to accomplish these checklist items follows:

- PM reciting the memory item says, "THROTTLE #3, IDLE." PM then places his hand on the #3 Throttle. Second Officer will then say, "#3 CONFIRMED." PM then moves the throttle to idle and replies, "IDLE."
- PM reciting the memory item says, "FIRE HANDLE #3, FULL FORWARD." Second Officer then places his hand on the #3 Fire Handle. PM will then say, "#3 CONFIRMED." Second Officer then moves the handle full forward and replies, "FULL FORWARD."

Once all memory items have been accomplished, the PM directs the Second Officer to read the checklist, "FROM THE TOP." The Second Officer will then read the checklist title and the entire checklist, step by step, utilizing the Challenge, Response, Response format.

Reference Action items are those which are accomplished while reading the checklist. They are accomplished utilizing the Challenge, Response, Response format. The Second Officer fully recites each step, Challenge and Response. The crewmember performing the action then repeats the Response, after completing the action. Each step is completed prior to reciting the next step. Steps involving the actuation of Critical Items are accomplished as described above.

ABNORMAL PROCEDURES

All Abnormal Procedures are reference action and are accomplished utilizing the checklist. The Second Officer will fully recite each step, Challenge and Response. The crewmember performing the action then repeats the Response, after completing the action. Each step is completed prior to reciting the next step. Steps involving the actuation of Critical Items are accomplished as described above.

COMBINED CHECKLISTS

Normal procedures incorporated within Abnormal or Emergency checklists are read and accomplished as Normal checklists. The Second Officer reads only the challenge and the appropriate designated crewmember(s) completing the action will respond.

INTERMEDIATE POINTS

Some checklists have intermediate points identified by a dashed line. The checklist is completed to the dashed line, then finished at the appropriate time.

AOM/EXPANDED CHECKLISTS

When accomplishing checklists using the AOM, only the primary Challenge and Response need to be read aloud. Explanatory notes and comments are not read unless required for clarity.

INDEX

The index to this chapter consolidates all Emergency and Abnormal procedures into one list for easier reference.

DC-8 AIRCRAFT OPERATING MANUAL



GENERAL EMERGENCY GUIDANCE

When formulating a course of action during an emergency situation, there is no substitute for good judgement and a thorough analysis of all conditions and variables. Because of the complexity of these variables, it is not possible to list them all in this document. However, these three steps, in the order of priority listed, will generally apply to all emergency situations:

- Maintain aircraft control.
- Analyze the situation and take proper action.
- Land as soon as practicable.

In instances involving flight control malfunctions or other abnormalities whereby the pilot's ability to control the aircraft in full landing configuration down to V_{REF} is questionable, crews should perform a Controllability Check. Additionally, during the course of the emergency, the Captain will coordinate with the dispatcher and advise ATC of the crew's intentions. The "Three Ds" serve as a reminder in any emergency situation:

- Decare an emergency, if appropriate.
- Dump fuel, if required.
- Dispatcher – Call and advise when able.

CONTROLLABILITY CHECK

The purpose of a Controllability Check is to determine the minimum airspeed at which the aircraft is controllable. This situation would apply to flight control malfunctions or other abnormalities where, in the best judgement of the crew, aircraft control could be an issue.

The following are general guidelines for performing a Controllability Check:

- Consider reducing gross weight to the minimum practicable.
- Climb to a safe altitude (at least 5,000 feet above the ground).
- Select landing configuration.

- Slow toward V_{REF} .
- Use normal speeds for the approach and landing if the aircraft is fully controllable all the way to V_{REF} .
- In the course of slowing to V_{REF} if the aircraft begins to exhibit unstable tendencies, then the airspeed at which these tendencies occur must be used as the minimum controllable airspeed for the approach and landing.
- If airspeed higher than V_{REF} is determined to be the minimum controllable airspeed, evaluate whether runway length and condition are adequate for a safe landing.

OVERWEIGHT LANDINGS

DC-8 maximum landing weights listed in Chapter 1, Limitations, will not be exceeded unless imminent loss of life/aircraft dictates otherwise. When in the best judgement of the Captain, the risks associated with an airborne emergency far outweigh those caused by an overweight landing, it may be more prudent to land the aircraft overweight. Examples of such situations include, but are not limited to, aircraft fire, smoke and fumes in the cockpit, or severe physiological trauma. Should the Captain decide that, due to the nature of the emergency situation, an overweight landing is preferable to staying airborne to dump/burn off fuel, the following guidelines will be followed:

- Decare an emergency as appropriate.
- Contact Flight Control, as soon as possible, by radio.
- Land on the longest available runway.
- Plan the flare so as to touch down at the minimum possible sink rate and with minimum side loads on the landing gear.
- Make maximum use of spoilers and thrust reversers.
- Exercise extreme caution when applying brakes.



DC-8 AIRCRAFT : OPERATING MANUAL

CHAP: 2
PAGE: 15
REV : 45
DATE: 12/01/05

RADIO RACK OVERHEAT LIGHT ILLUMINATED (CONT'D)

INS OFF
EFIS MASTER SWITCHES OFF

AFTER PARKING:

If power not required on electrical busses:

GND SERVICE SWITCH GND SERVICE
Switch by forward entry door.
EXT POWER SWITCH OFF
Only Cabin Bus 4 is powered by external power.

If power required on electrical busses:

ADF OFF
VHF COMM C/B (3) (RADIO BUS 1, 2, 3) PULL
VHF NAV (VOR) C/B (2) (RADIO BUS 2, 3) PULL
DME C/B (2) (RADIO BUS 2, 3) PULL
WHEEL LONGITUDINAL TRIM C/B (2) (RADIO BUS 1) PULL

END OF PROCEDURE

PACK SMOKE

OXYGEN MASKS & GOGGLES ON

Smoke entering the cockpit through air conditioning ducts can generally be attributed to either (a) one of the engines (source of bleed air for air conditioning/pressurization), (b) one of the packs (conditions the bleed air and routes it to the cockpit), or (c) the air conditioning ducting. Specifically, a bad engine seal may allow oil smoke into the bleed air supply from the engine, a faulty pack bearing may introduce smoke into the ducting, or the air conditioning ducting itself may overheat and produce smoke. In any of these cases, this procedure attempts to identify the offending pack or engine and either turn it off or cut-off its bleed air output. After turning off a pack, wait approximately 30 - 60 seconds to see if the smoke clears. Throughout this procedure, adjust flow on the operative pack as needed to maintain air conditioning/pressurization.

RECIRC FAN OFF

The Recirc Fan will spread the smoke throughout the cockpit.

PNEUMATIC CROSSFEED VALVE CLOSE

Closing the Pneumatic Crossfeed valve will assist in isolating the source of the smoke. Whether in flight or on the ground, place the Pneumatic Crossfeed switch to CLOSE to ensure the valve is closed.

LEFT PACK OFF

(CONTINUED)

DC-8 AIRCRAFT OPERATING MANUAL



PACK SMOKE (CONT'D)

IF SMOKE DISSIPATES:

The left side is the faulty side. Leave Left Pack off. See Cautions and Notes at the end of this checklist. Make operational adjustments to cruise altitude and/or operable pack flow as necessary. Determine if the one operational pack can maintain air conditioning/pressurization.

If single pack is sufficient NO FURTHER ACTION REQUIRED

If single pack is not sufficient REFER TO IF BOTH PACKS ARE REQUIRED

IF SMOKE DOES NOT DISSIPATE:

LEFT PACK ON

RIGHT PACK OFF

- The right side is the faulty side. Leave Right Pack off. See Cautions and Notes at the end of this checklist. Make operational adjustments to cruise altitude and/or operable pack flow as necessary. Determine if the one operational pack can maintain air conditioning/pressurization.

If single pack is sufficient NO FURTHER ACTION REQUIRED

If single pack is not sufficient REFER TO IF BOTH PACKS ARE REQUIRED

IF BOTH PACKS ARE REQUIRED:

Use this procedure when the faulty pack/side has been identified, but the second pack is required in order to maintain air conditioning/pressurization. This procedure attempts to identify whether the problem is the pack itself, a faulty engine bearing/oil seal, or faulty air conditioning ducting. If the problem is the pack itself, two-pack operation is not possible. If it's a bearing, oil seal, or ducting, it may be possible to identify the engine and shut off bleed air from that engine.

OUTBOARD BLEED AIR SHUTOFF SWITCH
(ON SIDE OF OFFENDING PACK) OFF

OFFENDING PACK ON

If smoke does not reappear:

OUTBOARD BLEED AIR SHUTOFF SWITCH LEAVE OFF

Make operational adjustments to cruise altitude and/or pack flows as required. See Cautions and Notes at the end of this checklist. NO FURTHER ACTION REQUIRED.

(CONTINUED)



DC-8 AIRCRAFT OPERATING MANUAL

CHAP: 2
PAGE: 17
REV : 45
DATE: 12/01/05

PACK SMOKE (CONT'D)

If smoke reappears:

OUTBOARD BLEED AIR SHUTOFF SWITCH AUTO/HIGH
INBOARD BLEED AIR SHUTOFF SWITCH OFF

If smoke clears:

INBOARD BLEED AIR SHUTOFF SWITCH LEAVE OFF

Make operational adjustments to cruise altitude and/or pack flows as required. See Cautions and Notes at the end of this checklist.
NO FURTHER ACTION REQUIRED.

If smoke persists:

OFFENDING PACK OFF

Two-pack operation is not possible. Make operational adjustments to cruise altitude and/or pack flows as required. See Cautions and Notes at the end of this checklist. NO FURTHER ACTION REQUIRED.

CAUTION AND NOTES:

CAUTION: IF ONE PACK IS OFF, IT IS POSSIBLE TO DEPRESSURIZE THE AIRCRAFT UNLESS THE MIX VALVE FOR THE INOPERATIVE PACK IS MOVED TO FULL COLD.

NOTE: If one pack is OFF, monitor compressor temperature for the operable pack, and adjust temperature and pack cooling doors as necessary.

NOTE: If any pneumatic bleed is OFF, avoid icing encounters for remainder of flight. Engine and Scoops Anti-Ice may be used if needed. Airfoil Deice must be OFF.

END OF PROCEDURE

SUSPECTED PNEUMATIC MANIFOLD LEAK

MANIFOLD PRESSURE GAUGE CHECK

If pneumatic pressure is below approximately 12 psi, check engine thrust. If engine thrust is adequate and excessive pneumatic bleed is not being used, duct failure is suspected as causing the low pressure condition.

PNEUMATIC SWITCHES (AFFECTED SIDE) OFF

PNEUMATIC CROSSFEED CLOSED

PACK (AFFECTED SIDE) OFF

(CONTINUED)

DC-8 AIRCRAFT OPERATING MANUAL



SMOKE OF UNKNOWN ORIGIN OR SUSPECTED ELECTRICAL FIRE

OXYGEN MASKS & GOGGLES ON

Whenever smoke and/or fumes are detected in the aircraft, all crewmembers will don oxygen masks, and ensure the oxygen selector is set to 100%. This must be done as soon as possible to prevent being overcome by toxic smoke and/or fumes. Smoke goggles are required to prevent eye irritation or damage from smoke and/or fumes. Ensure all ACMS/Couriers don oxygen masks and goggles as appropriate.

Before starting this checklist, check all cockpit indications to ensure that the fire is indeed electrical in nature (or unknown), and not related to another source such as cargo fire, packs, etc. If so, refer to the appropriate checklist. Items to check include, but are not limited to, the following:

- CARGO SMOKE lights
- LOWER CARGO FIRE light
- Cockpit air conditioning outlets

Thoroughly scan all electrical indications in an attempt to note any obvious signs of an electrical anomaly (e.g., high load meter reading).

When performing this procedure, pause between each step to determine if the fault is isolated. Observe changes in smoke or electrical load indications to determine the location of faulty circuits. Once fault is determined, do not perform remaining steps after the smoke is eliminated.

As power is removed from the Left or Right Emergency Bus, the Captain's or First Officer's flight instruments lose their source of electrical power.

Heading and altitude information is provided by the respective INS, and should be available immediately after power is restored. If the INS Battery Unit fails prior to restoration of power, the INS must be aligned in the ATT/REF mode. In this case, only attitude information is available on the affected side.

ATC NOTIFY

In the course of running this checklist, it is highly likely that all VHF communications will be lost. Therefore, notify ATC immediately and request clearance in the event communications cannot be restored.

LAND AS SOON AS POSSIBLE

MANUAL PRESSURE CONTROL LEVER LOCKED

Lock Manual Pressure Control Lever in a position to prevent overpressurization when electrical power is removed from AC Bus 4. Ensure Manual Pressure Control Lever is locked OPEN prior to landing.

RECIRC FAN OFF

(CONTINUED)



DC-8 AIRCRAFT OPERATING MANUAL

CHAP: 2
PAGE: 29
REV : 45
DATE: 12/01/05

SMOKE OF UNKNOWN ORIGIN OR SUSPECTED ELECTRICAL FIRE (CONT'D)

EEC SWITCHES (ONE AT A TIME) OFF

This step removes power from the normal AC busses, but leaves power on emergency busses. If able to determine faulty circuit, restore unaffected EEC switches to ON. Leave effected EEC OFF and consult circuit breaker panel/Chapter 5 of the DC-8 Systems Manual to determine degraded systems and to make operational adjustments.

If EEC switches #1, #2 and #3 are placed to OFF, all ATC communications will be lost.

DC ISOLATE SWITCH ISOLATE

IF BOTH INBOARD GENERATORS ARE OPERATING:

AC ISOLATE SWITCH ISOLATE

GENERATOR CONTROL SWITCH #3 OFF

GENERATOR CONTROL SWITCH #3 ON

GENERATOR CONTROL SWITCH #4 OFF

GENERATOR CONTROL SWITCH #4 ON

GENERATOR CONTROL SWITCH #1 OFF

BATTERY SWITCH OFF

BATTERY SWITCH BATTERY

GENERATOR CONTROL SWITCH #1 ON

GENERATOR CONTROL SWITCH #2 OFF

GENERATOR CONTROL SWITCH #2 ON

FIRE HANDLE #3 DOT POSITION/THEN NORMAL

GENERATOR CONTROL SWITCH #3 RESET/ON

FIRE HANDLE #4 DOT POSITION/THEN NORMAL

GENERATOR CONTROL SWITCH #4 RESET/ON

FIRE HANDLE #1 DOT POSITION/THEN NORMAL

GENERATOR CONTROL SWITCH #1 RESET/ON

FIRE HANDLE #2 DOT POSITION/THEN NORMAL

GENERATOR CONTROL SWITCH #2 RESET/ON

(CONTINUED)

DC-8 AIRCRAFT OPERATING MANUAL



SMOKE OF UNKNOWN ORIGIN OR SUSPECTED ELECTRICAL FIRE (CONT'D)

NOTE: Circuits not checked during previous procedures:

- BATTERY BUS DIRECT
- GENERATOR CONTROL (PMG)
- EMERGENCY LIGHTING
- SAI BATTERY CIRCUITS
- INS

IF EITHER OR BOTH INBOARD GENERATORS NOT OPERATING:

TRANSFORMER RECTIFIER #1 AND #4 C/Bs
(Three each on Respective AC Bus) PULL

TRANSFORMER RECTIFIER #1 AND #4 C/Bs
(Three each on Respective AC Bus) RESET

GENERATOR CONTROL SWITCH #1 OFF

GENERATOR CONTROL SWITCH #1 ON

GENERATOR CONTROL SWITCH #4 OFF

GENERATOR CONTROL SWITCH #4 ON

If problem persists, further isolation of busses can be accomplished by pulling both the AC and DC circuit breakers in the following sequence:

RIGHT EMERGENCY AC & DC BUS C/Bs (ALL) PULL

RIGHT EMERGENCY AC & DC BUS C/Bs (ALL) RESET

LEFT EMERGENCY AC & DC BUS C/Bs (ALL) PULL

LEFT EMERGENCY AC & DC BUS C/Bs (ALL) RESET

NOTE: Circuits not checked during previous procedures:

- BATTERY BUS
- BATTERY BUS DIRECT
- GENERATOR BUSES
- FEEDERS TO GENERATOR RELAYS (OPERATING GENERATORS)
- GENERATOR CONTROL CIRCUITS (PMG)
- EMERGENCY LIGHTING
- SAI BATTERY CIRCUITS
- INS

END OF PROCEDURE

DC-8 AIRCRAFT OPERATING MANUAL



LOWER AND/OR MAIN CARGO COMPARTMENT SMOKE OR FIRE

OXYGEN MASKS & GOGGLES ON

Whenever smoke or fumes are detected in the aircraft, all crewmembers will don oxygen masks (with oxygen selector at 100%) and smoke goggles. This must be done as soon as possible to prevent being overcome by toxic fumes or smoke. Smoke goggles are required to prevent eye irritation or damage from smoke or fumes. Ensure all ACMs/Couriers don oxygen masks and goggles.

- **Lower Cargo Compartment(s)** – Smoke and/or fire in any of the lower cargo compartments is indicated by the following visual warnings in the cockpit:
 - The “Lower Cargo Fire” warning light on the F/E panel illuminates.
 - The “Master Warning” light on the F/O glareshield illuminates.
 - The “Lower Cargo Fire” warning light on the CDU illuminates.
 - The CDU alphanumeric display indicates location of the smoke/fire:
 - FWD A – Belly 31
 - FWD B – Belly 32
 - AFT C – Belly 33
 - AFT D – Belly 34
- **Main Cargo Compartment** – Smoke and/or fire in the main cargo compartment is indicated by illumination of the Cargo Smoke light(s) on the Second Officer’s upper panel.

If Lower Cargo Smoke or Fire is INDICATED, and/or Main Cargo Compartment Smoke or Fire is INDICATED AND VERIFIED, proceed as follows:

PACKS 1 OFF, 1 ON MINIMUM FLOW
RECIRC FAN OFF
OVERHEAD AIR DIFFUSER VALVES OPEN
MAIN CARGO AIR SHUTOFF VALVE CLOSED
COCKPIT DOOR & LOUVERS CLOSED
RADIO RACK BLOWER SWITCH OFF
CABIN DIFFERENTIAL PRESSURE MANUALLY SET 0.5 PSI AND MAINTAIN

NOTE: PBE is certified to 8000 feet cabin altitude only.

LAND AS SOON AS POSSIBLE

(CONTINUED)



DC-8 AIRCRAFT OPERATING MANUAL

CHAP: 2
PAGE: 119
REV : 43
DATE: 12/01/04

LOWER AND/OR MAIN CARGO COMPARTMENT SMOKE OR FIRE (CONT'D)

If Immediate Landing Is Not Possible:

CABIN ALTITUDE MINIMUM 20,000 FEET & MAINTAIN

If Above 20,000 Feet Cabin Altitude:

RADAR & AUTOPILOT OFF

If Above 30,000 Feet Cabin Altitude:

TRANSPONDER OFF/STBY

DME STBY

If an over water flight, calculate oxygen available at 0.5 psi differential pressure versus altitude (refer to AOM 5.2). It may be necessary to change aircraft altitude to adjust for available oxygen. Use of Long Range Cruise may be required. When use of oxygen is required, the absence of smoke and fumes in the flight compartment should be considered sufficient justification to place the oxygen selector toggle switches in "Normal Oxygen" to extend usable oxygen time.

END OF PROCEDURE

DC-8 AIRCRAFT OPERATING MANUAL



FUMES EVACUATION

OXYGEN MASKS & GOGGLES ON

All aircraft occupants don oxygen masks, regulator selector levers set to 100% and ON. Don smoke goggles. Relocate any ACMs or couriers to flight station jumpseats, if available.

WARNING: IF FLAMMABLE FUMES ARE SUSPECT, CONSIDER KEEPING OPERATION OF ELECTRICAL EQUIPMENT TO A MINIMUM.

PACKS ON, MAX FLOW

To provide maximum airflow through the aircraft to reduce the concentration of fumes.

RECIRC FAN OFF

To prevent fumes being introduced into air distribution ducts and contaminating flow of fresh pack air.

COCKPIT DOOR AND LOUVERS CLOSED

To create a barrier between flight station and cargo compartment. Airflow will move toward tail of aircraft, reducing fumes in cockpit.

ALL COCKPIT AIR OUTLETS FULL OPEN

To provide maximum airflow through cockpit.

DESCEND TO 10,000' OR MEA IF HIGHER INITIATE

To begin to reduce cabin differential pressure.

CABIN ALTITUDE MAINTAIN

Manually maintain cabin altitude at existing altitude to reduce cabin differential pressure. Increasing cabin differential will reduce airflow through aircraft and may increase fume concentration. Higher cabin altitude may increase evaporation or aggravate leakage of substance causing fumes.

AFTER AIRCRAFT IS DEPRESSURIZED

(aircraft descends through existing cabin altitude)

CABIN PRESSURE CONTROL LEVER LOCKED OPEN

To provide maximum airflow through aircraft.

NOTE: Leave packs running during and after landing to prevent buildup of fumes in aircraft.

AFTER LANDING:

EVACUATE AIRCRAFT (AS REQUIRED)

Determine if it is safe to clear active runway after landing. If an emergency evacuation is required, consider using cockpit side windows.

END OF PROCEDURE



DC-8 AIRCRAFT OPERATING MANUAL

CHAP: 2
PAGE: 123
REV : 43
DATE: 12/01/04

EMERGENCY EVACUATION

During an unplanned (not briefed) evacuation, such as an incident during taxi, rejected takeoff or landing, time is not available for cockpit preparation. If an incident occurs that requires an immediate, unplanned evacuation, the Captain stops the aircraft and calls for the EMERGENCY EVACUATION checklist.

TOWER NOTIFY

First Officer notify the tower, or appropriate ATC facility, the crew is evacuating the aircraft. Advise of the nature of the emergency if time permits.

PARKING BRAKE SET

Captain set the brakes.

FUEL SHUTOFF LEVERS OFF

First Officer select all fuel shutoff levers to the OFF position.

FIRE HANDLES FULL FORWARD FIRE AGENT (IF REQUIRED) DISCHARGE BATTERY SWITCH OFF

Second Officer actuate all Fire Handles full forward. Discharge all fire agent bottles; (1 and 4 aft, 2 and 3 forward), if required. If in doubt as to aircraft condition (fire, etc.), discharge fire agent bottles. If the cause of the emergency evacuation is clearly not engine-related, then there is no need to discharge the bottles. Fire Handles should not be actuated until after First Officer notifies Tower/ATC of the evacuation. Second Officer turns Battery Switch OFF after fire bottles are discharged (if applicable).

EMERGENCY EVACUATION ACCOMPLISH

All crewmembers and ACMs evacuate through the cockpit window exits or forward cabin door. Captain will determine and announce location outside aircraft where crewmembers and ACMs are to meet after evacuation. Captain, or next senior crewmember will determine if everyone has safely evacuated the aircraft, and report to ground emergency personnel when able.

END OF PROCEDURE

DC-8 AIRCRAFT OPERATING MANUAL



EMERGENCY LANDING

A planned (briefed) emergency landing does not have the critical time element that exists during an unexpected emergency. When there is time to plan for an emergency landing, the crew should accomplish the following:

- Establish radio contact with ATC, report nature of emergency, intentions, fuel remaining (hours/minutes), number of people onboard and any assistance required.
- Brief all ACM/Couriers on evacuation procedures, including primary and secondary exists.
- All adjustable cockpit seats locked facing forward.
- Captain announced "BRACE" approximately 30 seconds prior to touchdown – order all ACM/Couriers to "STAY DOWN."

ATC, DISPATCH, AND ACM/COURIERS ADVISE
TRANSPONDER SET 7700
EXCESS FUEL DUMP
LOOSE ARTICLES SECURE
PACKS (BELOW 10,000 FEET) OFF
CABIN PRESSURE CONTROL LEVER FULL DOWN/LOCKED
COCKPIT DOOR LOCKED OPEN
APPROACH, LANDING CHECKLISTS ACCOMPLISH

After aircraft comes to a stop the crew should evacuate. Procedures outlined in EMERGENCY EVACUATION checklist may be used. In addition, Second Officer takes First Aid Kit when evacuating.

END OF PROCEDURE



DC-8 AIRCRAFT OPERATING MANUAL

CHAP: 3
PAGE: 25
REV : 43
DATE: 12/01/04

VISUAL APPROACHES			
	PF	PM	SO
Upon descent through 18,000' or at appropriate point in approach profile	APPROACH CHECKLIST		Repeat " APPROACH CHECKLIST " and accomplish checklist
When Approach Checklist is complete			APPROACH CHECKLIST COMPLETE
At appropriate points in approach profile	FLAPS XX	Repeat " FLAPS XX " and select flaps to requested position	
At appropriate point in approach profile	GEAR DOWN, LANDING CHECKLIST	Repeat " GEAR DOWN " and select gear handle to DOWN position	Repeat " LANDING CHECKLIST " and accomplish checklist
At 1,000 feet HAT; after checking PF and PM instruments in agreement, with no warning flags in view		1,000 FEET, INSTRUMENTS CROSSCHECKED, NO FLAGS	
In response to "1,000 FEET..." call	RUNWAY IN SIGHT		
At 500 feet; speed relative to inner bug, sink rate from VSI		500 FEET +/- _____ SINK _____	
At altitudes referenced to radio altimeter (back up for GPWS audio alerts)			100, 50, 30, 20, 10
During a visual approach, the PM calls out the following deviations below 1,000 feet AGL:			
<ul style="list-style-type: none">Sink rate in excess of 1,000 FPMAirspeed +5 to -0 from target			

LANDING AND ROLLOUT			
During landing transition and flare, PM calls out when airspeed is less than V_{REF} .			
	PF	PM	SO
When SPOILER EXTEND light illuminates			SPOILERS EXTENDED
If reverse N_1 exceeds 80% on any engine			N_1
Slowing through 80 KIAS		80 KNOTS	
Slowing through 60 knots		60 KNOTS	

ANY REGIME OF FLIGHT			
	PF	PM	SO
Whenever ALTS annunciation changes from white to green	ALTITUDE CAPTURE		



DC-8 AIRCRAFT OPERATING MANUAL

CHAP: 3
PAGE: 97
REV : 45
DATE: 12/01/05

ALTITUDE SELECTOR

Set clearance altitudes in the altitude selector when clearances are received.

PM:

- Acknowledge ATC assigned altitude.
- Set assigned altitude in altitude alerter/selector.

PF:

- Announce aloud the new ATC assigned altitude.
- DO NOT depart present altitude until new assigned altitude is set and verified.

PRESSURIZATION

Set Automatic Cabin Pressure Controller to 200 feet above destination airport field elevation.

APPROACH BRIEF

Thorough planning and briefing is the key to a safe and professional approach.

Prior to any approach the PF briefs the crew. The brief is normally conducted after the Second Officer monitors ATIS and completes the Landing Data Card. The brief should be conducted as early as possible to allow sufficient time to review all relevant information.

The approach brief should include a review of any specific conditions or procedures which need to be emphasized to ensure a safe and well organized approach and landing. The briefing should also include the planned runway turnoff point and initial taxi route expected. Review information on the Landing Data Card. The Captain and First Officer should agree on the appropriate inner bug setting based on ATIS or reported airport wind. Ensure all crewmembers understand how, when and where the approach radios and nav aids are to be tuned, identified and set. Autopilot and flight director procedures should be reviewed, if appropriate.

The minimum required content of a UPS standard approach brief is located in the FOM, Chapter 3.

APPROACH

GENERAL

All instrument approaches have certain basics in common. These are good descent planning, careful review of the approach procedure, accurate flying and good crew coordination.

Complete the approach preparations and brief prior to arrival in the terminal area. Both pilots will have the instrument approach chart available. The approach brief should include instructions on when to switch from terminal navigation to approach nav aids. Tune and identify the navigation radios as soon as practical. Do not completely abandon enroute navigation procedures, even when ATC is providing radar vectors to the initial or final approach fix.

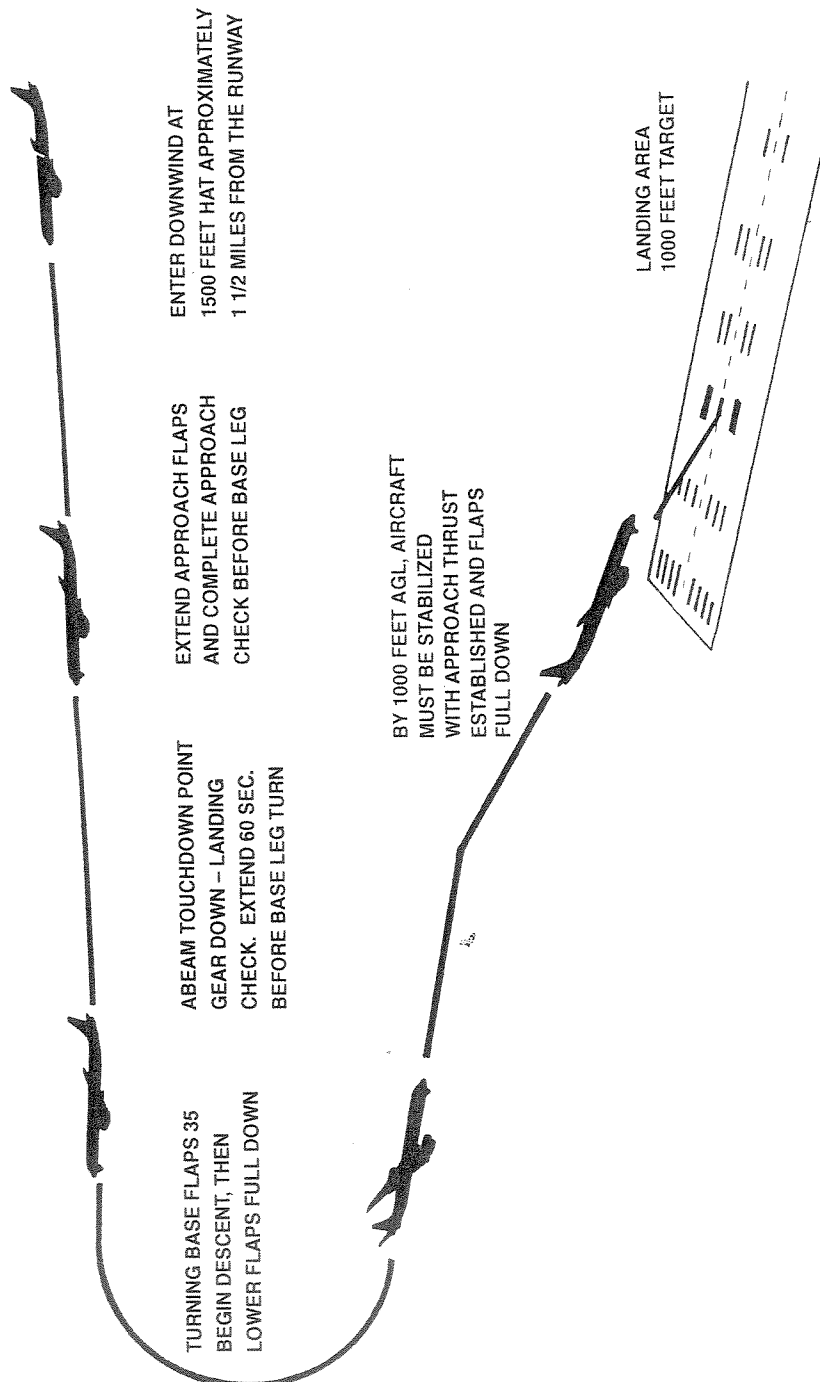
The INS is authorized for use in the terminal area. Crews will ensure that INS update functions are enabled and that an update is accomplished (green update light ON) within approximately five minutes of entry into the terminal area. The VOR/DME Tuning Select knob may be in AUTO in the terminal area until a vector to intercept the final approach course is received. The PM will continuously monitor raw data and notify the PF if a discrepancy exists. If this occurs, or if INS accuracy/reliability becomes suspect at any time, the PF will revert to raw data navigation immediately. Use of INS as the primary means of navigation in the terminal area is authorized only when cleared to points within the INS database. Crews will not spend excessive time "heads down" in the terminal area programming coordinates of points not in the INS database. Regardless of the means of navigation in the terminal area, the approach and landing phases of the flight must be flown with VOR/LOC as CRS ACT, NAV, APCH, or HDG selected on the Mode Select Panel, and the VOR/DME Tuning Select knob in MANUAL.



DC-8 AIRCRAFT OPERATING MANUAL

CHAP: 3
PAGE: 109
REV : 41
DATE: 06/01/04

VISUAL APPROACH PROFILE





DC-8 AIRCRAFT OPERATING MANUAL

CHAP: 4
PAGE: 55
REV : 45
DATE: 12/01/05

- Stow the T-handle. Close the isolation valve. Close the access door.

After opening the cargo door, the Second Officer returns to his station and the crew completes procedures as outlined in Chapter 3, Normal Procedures, **SHUTDOWN**.

SUPPLEMENTAL COCKPIT CLIMATE CONTROL OPERATION

The supplemental cockpit climate control system is used to maintain a desired cockpit temperature during ground operations. The system should be used instead of the aircraft packs for ground heating or cooling. The fan only (FAN LO or FAN HI) can be used on the ground or in flight.

For any suspected malfunction, turn the system OFF.

LOWER CARGO SMOKE DETECTION SYSTEM

GENERAL

This system provides the crew a visual indication of a fire in any lower cargo compartment. The system consists of 19 Smoke Detector Units located in the ceilings of the lower cargo compartments, a Control Display Unit (CDU) in the cockpit to the right of the F/E station, a Central Control Unit (CCU) in the aft accessory compartment, and a Lower Cargo Fire warning light on the F/E panel.

The CDU includes annunciator lights and controls which provide system status and fire alarm information.

- "SYS OK" light must be illuminated for dispatch.
- No cargo/baggage may be carried in the forward A or B lower cargo compartments if the "FWD A INOP/FWD B INOP" message(s) is/are displayed on the CDU.
- No cargo/baggage may be carried in the aft C or D lower cargo compartments if the "AFT C INOP/AFT D INOP" message(s) is/are displayed on the CDU.

See AOM, Chapter 3 for Check & Test Procedures for this system.

Use this table to determine crew actions required by illumination of various CDU annunciator lights:

GROUND	
LIGHTS	ACTION
"MX" Illuminated "SYS OK" Not Illuminated	No Capability/No Dispatch
"MX" Illuminated "SYS OK" Illuminated	System Requires Maintenance/OK for Dispatch
FLIGHT	
"MX" Illuminated "SYS OK" Not Illuminated	Continue Flight and Notify Maintenance

CATEGORY II OPERATIONS

GENERAL

UPS is authorized to operate DC-8 aircraft for Category II approaches down to published minimums of 100 feet HAT with an RVR of 1200 feet.

The Decision Height (DH) for a Category II approach is normally based on Radio Altitude (RA). When the radio altimeter is used to determine minimums, the published RA is set in the DH window in the lower right corner of the EADI. The barometric altimeter reference bug is set at the Decision Altitude Equivalent, but is for reference only.

Some Category II approaches have minimums which state "RA NOT AUTHORIZED." For these approaches 0 (zero) is set in the radio altimeter DH window. Determination of minimums for these approaches depends on the HAT authorized. For an approach with minimums 150 feet HAT, the barometric altimeter is used to determine minimums and the barometric altimeter reference bug is set at the published Decision Altitude (DA). For an approach with minimums 100 feet HAT, the inner marker is used to determine minimums. The barometric altimeter reference bug is set to the Inner Marker Equivalent Altitude, but is for reference only.